



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

ROY COOPER • Governor

MANDY COHEN, MD, MPH • Secretary

DANNY STALEY • Director, Division of Public Health

July 17, 2018

To: North Carolina Clinicians

From: Ricky Langley, MD, MPH, Physician Consultant

Re: Measurement of GenX and other PFAS in blood and urine (2 pages)

This memo is intended to provide information to clinicians to respond to patient questions about measurement of GenX and other per- or polyfluoroalkyl substances (PFAS) in blood and urine.

Background

In July 2017, the North Carolina Departments of Environmental Quality (NC DEQ) and Health and Human Services (NC DHHS) began investigating GenX and other PFAS contamination of the Cape Fear River.

GenX is part of a family of human-made chemical compounds called PFAS, which also includes the chemicals perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). PFAS are most commonly used in the manufacture of such products as non-stick cookware, fabric protectors, and firefighting foams. The public is exposed to PFAS mainly through contaminated drinking water, although other opportunities for exposure exist including eating fish caught from water contaminated by PFAS; accidentally swallowing contaminated soil or dust; eating food that was packaged in material that contains PFAS; or using consumer products such as non-stick cookware, stain resistant carpeting, and water repellant clothing.

NC DEQ continues to conduct environmental sampling of drinking water, air, and other potential sources of exposure. More information about the ongoing investigation in North Carolina is available here: <https://deq.nc.gov/news/hot-topics/genx-investigation>.

PFAS Testing

There is no recommendation from NC DHHS or the Centers for Disease Control and Prevention (CDC) that clinicians should test patients for PFAS. It remains unclear if these tests would be clinically useful, and it is not possible to connect PFAS test results with clinical outcomes. In

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LOCATION: 5505 Six Forks Road, Building 1, Raleigh, NC 27609
MAILING ADDRESS: 1912 Mail Service Center, Raleigh, NC 27699-1912
www.ncdhhs.gov • TEL: 919-707-5900 • FAX: 919-870-4807

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addition, these tests may cost several hundred dollars. Should a patient want to pursue testing, the following laboratories can test for some PFAS including PFOA and PFOS.

NMS Labs
1-866-522-2206

Quest Diagnostics
1-866 697-8378

SGS AXYS
1-888-373-0881

Currently, NC DHHS is not aware of any commercial laboratories that are able to test human specimens for GenX. However, some people might have GenX testing of blood or urine performed through research studies or as part of an exposure investigation.

Resources for Talking with your Patients

Some information is available about health effects associated with older or “legacy” PFAS, including PFOA and PFOS. However, at this time, little is known about the health effects of emerging PFAS including GenX. We do not have sufficient medical information to advise whether past, current, or future health problems could be associated with exposure to GenX or other PFAS.

The CDC has developed the following fact sheet for clinicians to help discuss PFAS exposure with their patients: https://www.atsdr.cdc.gov/pfas/docs/pfas_clinician_fact_sheet_508.pdf.

When discussing PFAS testing, it is important to communicate that these tests cannot:

- tell them where or how they were exposed to PFAS;
- tell them what, if any, health problems might occur, or have occurred, because of PFAS exposure; or,
- be used to guide treatment decisions.

Other Resources

NC DHHS will continue to provide information and support to clinicians so that they can have an informed discussion with their patients about what PFAS exposure might mean for their health. Additional health information about PFAS can be found here: <https://deq.nc.gov/news/hot-topics/genx-investigation/health-related-resources-about-genx-pfoa-and-pfas>. Health-related questions about PFAS exposure in North Carolina can be directed to the Occupational and Environmental Epidemiology Branch of the NC DHHS at 919-707-5900.